

PATENT APPLICATION

Express Mail Label No.: EL 640 011 440 US

IN THE U.S. PATENT AND TRADEMARK OFFICE

May 30, 2001

Applicants : Takayoshi TANIAI et al  
For : IMAGE DISPLAY APPARATUS BY PROJECTOR  
Atty. Docket No.: Furusawa Case 60  
Assistant Commissioner for Patents  
Washington, DC 20231

**PRELIMINARY AMENDMENT CANCELING CLAIMS**

Sir:

Prior to calculation of the filing fee in the above-identified application, kindly enter the following:

**IN THE CLAIMS**

Please amend Claims 9 and 12 as shown on the attached marked-up page. Pursuant to 37 CFR \$1.121, a replacement page with the amended claims presented in clean form is also enclosed.

**REMARKS**

This amendment cancels claims to reduce the filing fee. Please enter this amendment before calculating the filing fee.

Respectfully submitted,

  
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Encl: Marked-Up and Clean Amended Claims 9 and 12

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9. (Amended) The image display apparatus by a projector defined in claim 5 ~~or claim 6~~, wherein the white color/black color insertion timing control circuit comprises the first counter for counting the pulse width of the trigger signal, the second counter for counting and detecting the assert position of the trigger signal, the ratio calculator for varying the pulse width counted by the first counter, according to the mean luminance, the W/B selector for selecting either the white color or the black color according to the mean luminance, the pulse generator for asserting the pulse width determined by the ratio calculator at the timing of the counting by the second counter, and the output control circuit for selecting the color information corresponding to the trigger signal or the white color or the black color information responding to the timing signal generated by the pulse generator, thereby enabling the white color or black color information to be inserted and the contrast to be improved.

12. (Amended) The image display apparatus by a projector defined in claim 5 ~~or claim 6~~, wherein, in outputting the color information corresponding to the trigger, while the voltage outputted from the D/A conversion circuit is under control, the insertion timing of the white color or the black color is controlled, whereby not only the contrast and the purity of the white color or the black color can be improved but also the purities of other colors can be maintained as high as possible.

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9. (Amended) The image display apparatus by a projector defined in claim 5, wherein the white color/black color insertion timing control circuit comprises the first counter for counting the pulse width of the trigger signal, the second counter for counting and detecting the assert position of the trigger signal, the ratio calculator for varying the pulse width counted by the first counter, according to the mean luminance, the W/B selector for selecting either the white color or the black color according to the mean luminance, the pulse generator for asserting the pulse width determined by the ratio calculator at the timing of the counting by the second counter, and the output control circuit for selecting the color information corresponding to the trigger signal or the white color or the black color information responding to the timing signal generated by the pulse generator, thereby enabling the white color or black color information to be inserted and the contrast to be improved.

12. (Amended) The image display apparatus by a projector defined in claim 5, wherein, in outputting the color information corresponding to the trigger, while the voltage outputted from the D/A conversion circuit is under control, the insertion timing of the white color or the black color is controlled, whereby not only the contrast and the purity of the white color or the black color can be improved but also the purities of other colors can be maintained as high as possible.